

Patent Claims

1. A closure device (10) for a container (50) for liquid fuel comprising:
 - 5 a pressure equalisation device, which provides a fluid connection between a gas space of the container (50) and the outside, wherein the pressure equalisation device comprises a flexible pressure equalisation pipe (44) with a float (43), on which one end of the flexible pressure equalisation pipe (44) is fastened such that it opens into the gas space;
 - 10 a liquid duct (35); and
 - a liquid suction pipe (45), which communicates at one end with the liquid duct (35) and which at another end is immersed in liquid when liquid is present in the container.
- 15 2. Device (10) according to Claim 1, further comprising:
 - an actuatable shut-off device (36), the actuation of which establishes a fluid connection between the interior and the exterior of the container (50) through the liquid duct (35).
- 20 3. Device (10) according to Claim 2, in which an actuation mechanism of the actuatable shut-off device (36) is formed such that it can be actuated only by a connection device specially provided for that purpose which can be connected to the closure device.
- 25 4. Device (10) according to Claim 2 or 3, wherein the shut-off device of the liquid duct comprises an actuatable valve.
5. Device (10) according to one of the aforementioned claims, wherein the liquid pipe (45) is flexible at least in sections.
- 30 6. Device (10) according to Claim 5, wherein the further end of the flexible liquid pipe (45) is weighted down with at least one weight.
7. Device (10) according to one of the Claims 5 or 6, wherein the further end of the flexible liquid pipe (45) is connected to the float (43) or to a further float.
- 35 8. Device (10) according to one of the aforementioned claims, which is formed such that it can be

pressed into the removal opening (52) of the liquid container (50).

- 5 9. Device (20) according to one of the aforementioned claims, which comprises devices (21) for fitting to the removal opening (52), which correspond to the devices (11) of a conventional closure for the removal opening (52).

10. Device according to one of the aforementioned claims, comprising:

a connection device for an external liquid pipe.

11. Device according to one of the aforementioned claims, comprising:

a connection device for a venting / ventilation pipe.

12. Device according to one of the aforementioned claims, in which the pressure equalisation device comprises a pressure relief valve.

13. Liquid conveyance system, in particular for the supply of fuel to a fuel cell system comprising:

a closure device (10) according to one of the aforementioned claims;

a connection device (100), which can be connected to the closure device (10), to establish a fluid connection between the liquid suction pipe (45) of the closure device (10) and an external liquid pipe (119) via the closure device (10).

14. Liquid conveyance system according to Claim 13, wherein the connection device (100) is formed such that it actuates the actuatable shut-off device (36) of the liquid duct (35) on connection to the closure device (10) in order to provide a fluid connection between the liquid space of the container and the outside of the container (50).

15. Liquid conveyance system according to Claim 13 or 14, wherein the connection device (100) is formed such that gases can be passed from the liquid container (50) without them accessing the environment when the connection device (100) is connected to the closure device (10).

16. Container with a closure device (10) according to one of the Claims 1 to 12.